



## Progressive Flow Control (PFC) in the NO<sub>x</sub> Budget Trading Program

Flow control provisions were designed to discourage extensive use of banked allowances in a particular ozone season.

- Flow control is triggered if the total number of banked allowances from all sources exceeds 10 percent of the region-wide NO<sub>x</sub> emissions budget.
- After completing compliance deductions for an ozone season, EPA tabulates the total number of banked allowances.
  - If the total bank is less than 10% of the regional trading budget, then no flow control will apply in the following season.
  - If the total bank is greater than 10% of the regional trading budget, then EPA calculates the flow control ratio.
    - This ratio indicates what percentage of banked allowances can be used with no discount for compliance in the following ozone season ("1-for-1") and what percentage of banked allowances, if used, must be discounted and deducted at a rate of two allowances for each ton of emissions ("2-for-1").
  - The discount ratio only applies to allowances when a source uses them for compliance purposes. Allowances sold or traded on the allowance market are never subject to flow control.
- The flow control ratio is recalculated each year after compliance is completed.

### **An Example of How Flow Control Works**

- Assume a total regional trading program budget of 500,000 allowances.
- Assume after year 1, sources have banked 65,000 allowances.
- Since the bank is more than 10 percent of total budget ( $65,000/500,000 = 13$  percent), a flow control ratio will apply in year 2 when banked allowances are used for compliance.
- The flow control ratio would be 0.77 (determined by dividing 10 percent of the total trading program budget by the total number of banked allowances, or  $50,000/65,000$ ).
- The flow control ratio is applied to banked allowances in each source's allowance accounts at the time of compliance reconciliation. If a source holds 1,000 banked allowances at the end of year 2, it will be able to use 770 of them on a 1-for-1 basis, but will have to use the remaining 230, if necessary, on a 2-for-1 basis for compliance.

Scenario 1: If the source needed to cover 850 tons of emissions with banked allowances, 770 allowances would be deducted 1-for-1 and 160 allowances would be deducted 2-for-1 (leaving 70 unused allowances.)

Scenario 2: If the source needed to cover 750 tons of emissions with banked allowances, 750 allowances would be deducted 1-for-1 (leaving 250 unused allowances.)